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PATENT  
Attorney Docket 44921-5055-02

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: **Patricia Murphy et al.** )  
Application No. **09/734,672** ) Group Art Unit: **1636**  
Filed: **December 13, 2000** ) Examiner: **Sumesh Kaushal**  
For: **Coding Sequences of the Human BRCA1 Gene** )

#15

**RESPONSE TO SECOND RESTRICTION REQUIREMENT**

In response to the second Restriction Requirement dated January 24, 2003 (Paper No. 13), the period of response to which has been extended one month to March 24, 2003, **Applicants hereby elect Group II (claims 28-48) directed to the isolated nucleic acid molecule of SEQ ID NO: 3 (BRCA1 omi2) which encodes the amino acid of SEQ ID NO: 4 with traverse.**

With regard to the traversal of the restriction requirement, the Office Action indicates that the claims should be further restricted to a single nucleic acid sequence (SEQ ID NO: 1 or 3) because they are structurally distinct sequences which encode functionally distinct peptides. Applicants disagree because both SEQ ID NO: 1 and 3 contain the recited thymidine substitution at a position corresponding to nucleotide 2201 and therefore are not structurally distinct sequences. Furthermore, both SEQ ID NO: 1 and 3 encode BRCA1 proteins which are not associated with breast cancer and therefore encode proteins that have the same function (*i.e.*, association with the absence of breast cancer).

The Office Action also indicates that an additional search burden exists, since a different search is required for each site and cites as an example that a search of SEQ ID NO: 1 is not required for a search of SEQ ID NO: 3. Applicants disagree and submit that all that is required for examination purposes is a search of either SEQ ID NO: 1 or 3 as both of these nucleotide sequences contain the same substitution recited in claim 28 (*i.e.*, thymidine for cytidine at nucleotide 2201). No undue search burden is therefore present because a search of either sequence will reveal nucleic acid sequences present in the prior art that contain the recited substitution. In lieu of the aforementioned remarks, Applicants respectfully request withdrawal of the second restriction requirement.

In accordance with the request of the Examiner made in the above-referenced Office Action, Applicants attach a clean copy of pending claims 28-48.

**Except** for issues payable under 37 C.F.R. 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. 1.16 and 1.17 which may be required, including any required extension of time fees, or credit

any overpayment to Deposit Account 50-0310. This paragraph is intended to be a **constructive petition for extension of time** in accordance with 37 C.F.R. 1.136(a)(3).

Dated: **March 24, 2003**

Morgan, Lewis & Bockius LLP

Customer No. **09629**

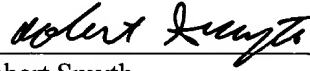
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Respectfully submitted

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